

REMARKS

Claims 66-85 were pending when the Office Action was mailed. Applicants herein amend claims 66, 74, and 82 and do not cancel any claims or present new claims. Accordingly, claims 66-85 remain pending.

Applicants would like to thank the Examiner for the consideration extended during the telephone interview conducted on May 1, 2008. During the interview, Examiner Wozniak and applicants' representatives discussed the cited references and the proposed amendments to claim 66. As requested by the Examiner, applicants herein amend the claims to clarify the term "action." Applicants have amended claims 66, 74, and 82 to indicate that each action is implemented using a set of computer-executable instructions that are specific to each action (e.g., "VBScript or other Code"). (Specification, 22:26). Applicants submit that even without these amendments, the previously presented claims are patentable over the cited references, as each of the cited references fails to teach or suggest storing actions. Should the Examiner need additional information regarding the interview, he is asked to contact the undersigned.

The Office Action rejects claims 66-71, 73-79, 81, 83, and 84 under 35 U.S.C. § 103(a) over Yamaguchi, Shanahan, and Kimura; rejects claims 72, 80, and 85 under 35 U.S.C. § 103(a) over Yamaguchi, Shanahan, Kimura, and Hita; and rejects claim 82 under 35 U.S.C. § 103(a) over Yamaguchi and Kimura. Applicants respectfully traverse these rejections. Nevertheless, applicants herein amend the claims to clarify the subject matter for which they seek protection.

Applicants' technology "automat[es] actions that exhibit behaviors in a document, based upon text entered in the document by a user" using a centralized dictionary that associates linguistic components and contexts with actions. (Specification, Abstract, 5:27-28). When a user enters text into a document, applicants' claimed technology parses the text for linguistic components and determines whether the dictionary contains an entry for any identified linguistic component and the current context. In

response to identifying a match, applicants' technology may automatically perform an action. For example, when a user types a particular word into a cell of a spreadsheet, applicants' technology may automatically fill in a number of other cells based on the identity of the user entering the text and/or the document type (i.e., the context). Alternatively, applicants' technology may cause a document to print or copy a portion of text to another document in response to parsing a particular linguistic component. (Specification, 22:24-25). Furthermore, because applicants' dictionary is centrally managed, a consistent set of associations between linguistic components and contexts and actions can be maintained across multiple users.

In contrast, Yamaguchi is directed to a technique for retrieving data from a database and inputting the retrieved data into a spreadsheet. (Yamaguchi, Abstract). Yamaguchi provides a "natural language interface process for converting [a] descriptive sentence into a retrieval formula for retrieving [] data from [a] database." (Yamaguchi, 2:40-42). For example, in response to a user entering the phrase "RETRIEVE PROFIT FOR 2ND HALF YEAR," Yamaguchi translates the phrase into a query language suitable for retrieving data from the database and stores the retrieved data in a spreadsheet. (Yamaguchi, Fig. 16). In this manner, a user can retrieve data from a database without being "familiar with details of the constitution of the database." (Yamaguchi, 1:50-52).

Shanahan is directed to a meta-document management system that provides a context-based auto-completion feature that "provid[es] suggestions of words that have been used previously in a contextually similar manner." (Shanahan, 53:67-54:2). Shanahan "anticipates the information needs of [a] user creating and/or editing [] document content by creating an information space around the document content that might be useful." (Shanahan, 56:23-26). When a user "types in the initial characters of a word" and invokes the auto-completion process, Shanahan uses the typed characters "to extract context information using content surrounding the [characters] in the document." (Shanahan, 58:29-30, 39-41). A "formulated query is submitted to [an]

information retrieval system" and possible matches are displayed to the user for selection, saving the user from having to retype text. (Shanahan, 53:65). For example, after a user enters the first few characters of a book title in a bibliography, Shanahan may automatically insert the book's bibliographic data into the document.

Kimura is directed to a dictionary management apparatus used to update each of a plurality of dictionaries included in a language processing system and a dictionary server to store the dictionary data to be supplied to each dictionary. (Kimura, 1:6-9). In Kimura, a plurality of users may download and store dictionary data at each of several locations. Kimura allows each user to modify dictionary data and register these changes with a dictionary server. The dictionary server can also be used to distribute these modifications to other users.

Each of applicants' independent claims recites a dictionary that includes linguistic components and contexts with associated actions. For example, claim 66 recites "a dictionary that includes a correspondence between linguistic components and contexts with their associated actions." Similarly, claim 74 recites "a dictionary that includes linguistic components and contexts with associated actions." Similarly, claim 82 recites "a dictionary that includes entries that map linguistic components and contexts to associated actions." The Office Action relies on Figure 1, element 5 and 5:41-6:27 of Yamaguchi as disclosing this feature. Applicants respectfully disagree that Yamaguchi or any of the cited references disclose this feature. The relied-upon portions of Yamaguchi describe a database from which information can be collected and the process by which this information is collected from the database. In Yamaguchi, a user may submit a "descriptive sentence" which is converted, via a natural language interface means comprising a syntax analyzer, a context analyzer, a domain dependent processor, and an object language generator, to a command for retrieving data from the database, such as an SQL command. (Yamaguchi, 5:18-6:19). The database "comprises a multipurpose file integratedly constituted with a lot of mutually correlated data, and may be structured in a variety of forms." (Yamaguchi, 20-22).

The database, however, is merely a repository of data; it does not store actions. Each time Yamaguchi receives a descriptive sentence, Yamaguchi converts the sentence, extracts data from the database, and stores the data in a spreadsheet. Because Yamaguchi always performs the same action or set of actions, there is no need to store actions in the database. Similarly, Shanahan's auto-completion module, once invoked, adds text to a document based on text that a user has entered. Accordingly, there is no need in Shanahan to store actions in association with linguistic components and contexts. Similarly, Kimura's dictionaries merely store "vocabulary" data, not actions to be performed in response to a user providing text. Accordingly, none of the relied-upon references teach or suggest storing linguistic components and contexts in association with actions to be performed in response to a user entering particular text into a document.


Furthermore, applicants herein amend claims 66, 74, and 82 to indicate that applicants' dictionary can store multiple actions. Claims 66, 74, and 82 now recite "each action being implemented using a set of computer-executable instructions that are specific to each action." As discussed above, the relied-upon references always perform the same action and, therefore, it is unnecessary for the relied-upon references to store instructions for performing different actions. For the foregoing reasons, claims 66, 74, and 82 are patentable over the combination of Yamaguchi, Shanahan, and Kimura, as are their dependent claims 67-73, 75-81, and 83-85.

In view of the above amendments and remarks, applicants believe the pending application is in condition for allowance and respectfully request reconsideration.

Please charge any deficiencies, or credit any overpayment, to our Deposit Account No. 50-0665, under Order No. 418268741US from which the undersigned is authorized to draw.

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Respectfully submitted,

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